



Field Note Record For Drainage

Contract No.	Station / Line / MP	Staked by	Date	SR No.	Structure Code
008127	LE 1327+00 - 1329+18	Justin Perez	8/15/2019	I-90	DR01-22
Calculated by	Date	Date Work Started	All Work on this Structure 100% Completed?		
Colton Peyser	8/24/2019	6/3/2019	Yes <input checked="" type="radio"/> 8/23/2019 No <input type="radio"/> (Partial Payment)		

Inspector	Date	Reviewed by	Date		
Colton Peyser	9/5/2019	JH	9/18/2019		
Checked by	Date	Materials Mgr.	Date	Materials	
E. Knudson	9/19/2019			Yes	

DR01-22

Contractor Installed 1082 LF of 10" dia. underdrain pipe between DR01-22 and DR01-29

Station Limits: LE 1327+00 - 1329+18.

Only 218 LF of this will be paid for, the remainder is covered in the CRIP limits.

$15.5' \times 218' = 3379 / 9 = 375.4$ SY. Geotextile Fabric

$1' \times 7.5' \times 218' = 1635 / 27 = 60.5$ CY MFD.

Height low side = $6'' + 10'' \text{ pipe diameter} + 6'' = 22''$ $22'' / 12 = 1.83'$

Height high side with 6:1 slope = $22'' + 24'' \text{ width} \times 1/6 \text{ slope} = 26''$ $26'' / 12 = 2.17'$

Average height = $(2.17' + 1.83') / 2 = 2.00'$

Width per plan sheet DD7= 2.00'

Gross Area: $2.00' \times 2.00' = 4.00$ SF

10" diameter pipe area: $3.14159 \times (10''/12)^2 / 4 = 0.55$ SF

Net Area: $4.00 \text{ SF} - 0.55 \text{ SF} = 3.45 \text{ SF}$

$3.45 \text{ SF} \times 218' / 27 = 27.9$ CY Gravel Backfill

Structure Exc. Class B: $1.83' \times 2' \times 218' = 797.88 / 27 = 29.55$ CY

OK TO PAY 218 LF of 10" Dia. under drain pipe.

OK TO PAY 375.4 SY of Geotextile Fabric.

OK TO PAY 60.5 CY of MFD.

OK TO PAY 27.9 CY of Gravel Backfill.

OK TO PAY 30 CY of Structure Exc. Class B.

Vegetated Filter Strip paid for on separate FNR.

Field measured with tape.

Shipment Tag/Stamp #		Make/Model/Product #	

Item and Doc Num	Item Num	Material Brand Name, Model or Type	Manufacturer	RAMS/QPL Ref. No.	Method of Accept. / Accept. Code	Used Y/N	FNR # (Office Use)	Acceptance Date Installed	Quan.
<u>055.01</u> <u>QPL-0046</u>	055.01	Corrugated Polyethylene Drain Pipe Up to 10-inch Single Wall Pipe or AASHTO Pipe	ADS/Hancor, Inc.	QPL-0046	Mfr. Cert. per Stnd. Spec. 1-06.3 or See Current QPL 3101	Y		8/23/2019	218 LF
<u>299.01</u> <u>RAM-0212.06</u>	299.01	Gravel BKF for Drains	Ellensburg Cement Products	RAM-0212.06	15 Acceptance Sample(s) Required 1, 8	Y		8/23/2019	27.9 CY
<u>218.02</u> <u>RAM-0366</u>	218.02	Other MFD Mineral Aggregate MFD Mineral Aggregate	Ellensburg Cement Prod.	RAM-0366	1 Acceptance Sample per 1000 Tons 1, 8	Y		8/23/2019	60.5 CY
<u>341.01</u> <u>QPL-0021</u>	341.01	Underground Drainage, Low Survivability Class A Nonwoven MODEL 180N	TEN CATE (MIRAFI)	QPL-0021	Satisfactory test report from State Materials Laboratory or See Current QPL 7020	Y		8/23/2019	375.4 SY

Item Num	Item Description	Grp	Date Work Completed	Unit	Quantity	Ledger Entry No.	Init.	Posted By Date	Checked By Init.	Checked By Date	Est. No.
<u>0055</u>	UNDERDRAIN PIPE 10 IN. DIAM.	1	9/5/2019	L.F.	218	7414	EK	9/19/19			94
<u>0299</u>	GRAVEL BACKFILL FOR DRAIN	1	9/5/2019	C.Y.	27.9	7415	EK	9/19/19			94
<u>0341</u>	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	1	9/5/2019	S.Y.	376	7416	EK	9/19/19			94
<u>0218</u>	MEDIA FILTER DRAIN MIX	1	9/5/2019	C.Y.	60.5	7417	EK	9/19/19			94
<u>0296</u>	STRUCTURE EXCAVATION CLASS B INCL. HAUL	1	9/5/2019	C.Y.	30.0	7418	EK	9/19/19			94

Attachments



CO #006.pdf
Adobe Acrobat Document
386 KB



CO #044.pdf
Adobe Acrobat Document
394 KB

Structure Excavation

Pipe Structure Width

Station	Flow Line Grade	Original Ground	Sub-Grade	Centerline Cut		Offset Hub	Offset Cut F.L	Remarks
				Flow Line	Bottom Ditch			

Remarks and Calculations